

AP9641

**AMENDMENTS TO THE CLAIMS**

10. (Currently Amended) ~~SWT Sidewall Torsion~~ sensor for vehicles, comprising:  
a first housing for ~~the accommodation of~~ accommodating at least one converter element, and no signal processing unit, wherein said first housing is operatively coupled to a side wall of a vehicle tire,

a second housing for accommodating a signal processing unit, and no converter element,

an at least a 4-pole connection between the first and the second housing, and

wherein said second housing includes a port for a control device, wherein the signal processing unit arranged in said second housing is an analog amplifier with a current output and provides an alternating current with an approximately sinusoidal shape.

11. (Currently Amended) ~~SWT Sidewall torsion~~ sensor according to claim 10, wherein the second housing has a port designed as a 2-wire-connection, with a pin as signal output and a pin for the supply of operating voltage.

12. (Currently Amended) ~~SWT Sidewall torsion~~ sensor according to claim 10, wherein the converter element is designed as a magneto-electric converter.

13. (Currently Amended) ~~SWT Sidewall torsion~~ sensor according to claim 12, wherein the first housing ~~comprises~~ further includes means for accommodating functional elements for positioning or carrying at least one magnet used for pre-loading the magneto-electric converter elements.

14. (Currently Amended) ~~SWT Sidewall torsion~~ sensor according to claim 10, wherein said converter element is adapted to interface to a rotating member to pick up the speed of the rotating members.

15. (Cancelled)